



**State of New Jersey**  
**DEPARTMENT OF ENVIRONMENTAL PROTECTION**

**JON S. CORZINE**  
*Governor*

**LISA P. JACKSON**  
*Commissioner*

SEP 26 2007

Mr. George Pavlou, Director  
Emergency and Remedial Response Division  
U.S. Environmental Protection Agency  
Region II  
290 Broadway  
New York, NY 10007-1866

Re: L.E. Carpenter /Dayco Superfund Site  
Explanation of Significant Differences (ESD)

Dear Mr. Pavlou:

The New Jersey Department of Environmental Protection (NJDEP) has reviewed the "Explanation of Significant Differences for the L.E. Carpenter /Dayco Superfund Site, Wharton, Morris County, New Jersey" prepared by the U.S. Environmental Protection Agency (USEPA) Region II in September 2007 and concurs with its selected remedy to address lead, PCB, and DEHP contaminated soils at the site. The selected remedy is the excavation and off-site disposal of floating product and all soils above the New Jersey Residential Direct Contact Soil Cleanup Criteria (RDCSCC).

The major components of the selected remedy include:

- Floating product and associated smear zone soils were excavated and disposed of off-site as an alternative to the active removal system selected in the 1994 Record of Decision;
- Excavation and off-site disposal of soils containing PCBs and lead were completed to meet the more stringent RDCSCC at 0.49 ppm and 400 ppm, respectively;
- Bis (2-ethylhexyl) phthalate (DEHP) impacted soils were removed and disposed of off-site as opposed to being consolidated on-site into a soil treatment zone;
- Re-infiltration of treated groundwater will not be conducted for the purpose of treating contaminated soils, since contaminated site soils were removed to meet the RDCSCC; and

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- An institutional control, in the form of a Deed Notice, is no longer necessary since the RDCSCC were met for PCBs and lead in soil at the site.

NJDEP appreciates the opportunity to participate in the decision making process to select an alternative remedy that is more protective of human health and the environment. This remedy more effectively addresses the floating product and contaminated soils at the site.

If you have any questions, please call Leonard Romino, Assistant Director of the Responsible Party Remediation Element, at 609-984-2902.

Sincerely,



Irene Kropp, Assistant Commissioner  
Site Remediation and Waste Management Program

C: Leonard Romino, Assistant Director, Responsible Party Remediation Element  
Carole Petersen, Chief, New Jersey Remediation Branch, USEPA

## **EXPLANATION OF SIGNIFICANT DIFFERENCES**

### **DAYCO CORPORATION/L.E. CARPENTER SITE**

#### **Site Name and Location**

Dayco Corporation/L.E. Carpenter Company  
Wharton Borough  
Morris County, New Jersey

#### **Introduction**

The purpose of this Explanation of Significant Differences (ESD) is to explain the changes made by the New Jersey Department of Environmental Protection (NJDEP) and United States Environmental Protection Agency (EPA) to the remedy selected in the April 1994 Record of Decision (ROD) for the Dayco Corporation/L.E. Carpenter Company Superfund Site (L.E. Carpenter site or Site).

EPA issues this ESD in accordance with Section 117(c) of the Comprehensive Environmental Response, Compensation & Liability Act of 1980 (CERCLA), as amended, 42 U.S.C. §9617(c), and Section 300.435(c)(2)(i) of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 C.F.R. §300.435(c)(2)(i). The NJDEP concurred on this ESD through correspondence dated September 26, 2007.

The ESD and documents that provide the basis of the ESD decision will be incorporated into the Administrative Record for the Site in accordance with Section 300.825(a)(2) of the NCP. The Administrative Record is available for review during business hours at EPA Region 2, 290 Broadway, New York, NY 10007 and at the information repository in the NJDEP Offices in Trenton, New Jersey.

#### **Summary of Site History, Contamination Problems, and Selected Remedy**

The L.E. Carpenter site is located at 170 North Main Street, Borough of Wharton, Morris County, New Jersey. The Site occupies approximately 14.6 acres, and is located northwest of the intersection of the Rockaway River and North Main Street.

The L.E. Carpenter site includes buildings, warehouses, and remnants of disposal areas that are associated with a former

vinyl wall covering manufacturing facility in Wharton Township. L.E. Carpenter manufactured vinyl wall coverings from 1943 to 1987. The manufacturing process involved the generation of various solid and liquid waste streams which were disposed of in unlined on-site lagoons.

NJDEP conducted soil and groundwater sampling in 1980 and 1981. Sampling results indicated the presence of volatile organic compounds, base neutral compounds, metals, and PCBs. In addition, NJDEP observed immiscible chemical compounds floating on the groundwater table.

In response to the findings of these sampling efforts, in 1982, L.E. Carpenter and NJDEP entered into an Administrative Consent Order (ACO) in which L.E. Carpenter agreed to delineate and remove soil and groundwater contamination at the Site.

Pursuant to the 1982 ACO, L.E. Carpenter installed a groundwater monitoring system, constructed a floating product recovery system, and excavated approximately 4,000 cubic yards of sludge and contaminated soils from the former on-site lagoons. In addition, as part of NJDEP cleanup activities, L.E. Carpenter removed sixteen above ground storage tanks and associated contaminated soils.

The National Priorities List (NPL) is a list of sites eligible for long-term remedial evaluation and response under EPA's Superfund program. The Site was added to the NPL in April 1985. The Site is a state-lead site.

In September 1986, NJDEP and L.E. Carpenter entered into an Amended ACO which superseded the previous ACO. In accordance with the September 1986 ACO, L.E. Carpenter, the Potentially Responsible Party (PRP), began a site-wide remedial investigation to determine the nature and extent of contamination. The Remedial Investigation (RI) was conducted in several phases and completed in 1992. In 1993, a Feasibility Study (FS) was conducted to evaluate possible cleanup actions. NJDEP issued a ROD, with EPA concurrence, on April 18, 1994. The major components of the ROD are:

1. Installation and operation of a floating product/groundwater extraction system;
2. Installation and operation of a groundwater pump and treat system, with a portion of the treated groundwater

to be recirculated within a capture zone, another portion to be discharged into a deeper aquifer in accordance with groundwater discharge criteria, and another portion to be treated via biological treatment;

3. Excavation and consolidation of bis (2-ethylhexyl) phthalate (DEHP) contaminated soils into a soil treatment zone;
4. Reinfiltration of a portion of treated groundwater (with added oxygen and nutrients) into the unsaturated soil treatment zone via perforated piping to allow in-situ bioremediation of contaminated soils;
5. Installation of a vegetative soil cover for the area of the groundwater infiltration system;
6. Spot excavation and disposal of soils containing Polychlorinated biphenols (PCBs), lead and antimony, where levels exceed the soil cleanup levels in locations other than the east soils area designated as the disposal area;
7. Excavation of disposal area sludges/fill, which may inhibit in situ treatment; and
8. Establishment of environmental use restrictions on the property.

#### **Post ROD Activities**

#### **Soils and Floating Product**

Since the issuance of the 1994 ROD, a number of activities have taken place. In 1995, a site-wide delineation of lead impacted soils revealed that lead contamination was more extensive than previously anticipated. Lead was the most widespread contaminant in site soils. In December of 1997, the floating product removal system that was installed in 1982 was replaced with a new system, because removal of floating product occurred at a much slower pace than originally anticipated and had not yet been completed. After several years, the new floating product removal system was still found to be slow and inefficient.

Based on data collected after the ROD, NJDEP, EPA and L.E. Carpenter agreed that modifications to portions of the remedy related to soils and the floating product were warranted.

In April 2004, L.E. Carpenter submitted a work plan to NJDEP and EPA which proposed a more aggressive remedial approach than

anticipated in the ROD. The work plan included, but was not limited to, excavation and off-site disposal of a large on-site area containing floating product smear zone soils (visibly contaminated soils associated with floating product), and a more aggressive approach for excavation of lead contaminated soil to a level of 400 ppm. The aggressive approach to the cleanup resulted in achieving 0.49 ppm of PCBs in the soil, which is the New Jersey Residential Direct Contact Soil Cleanup Criteria. In December 2004, the NJDEP and EPA approved the work plan. The work performed by the PRP under this approved work plan is also known as the source reduction remediation.

Excavation of soil contaminated with lead and process wastes, floating product, and a PCB area began on January 27, 2005 and was completed in June 2005. The approximate amount of material excavated and removed off site for disposal during this phase of the remedial action was 46,521 tons, as follows: lead soils: 9,292 tons; process waste: 450 tons; and floating product smear zone soils (visibly contaminated soils associated with floating product) 34,052 tons; and PCB soils: 2,727 tons.

#### **Description of the Significant Differences and the Basis for those Differences**

This ESD addresses changes to the components of the remedy chosen in the 1994 ROD which called for floating product to be removed by an active removal system, the excavation and off-site removal of soils contaminated with lead at levels greater than 600 ppm, and the excavation and off-site removal of soils contaminated with PCB levels greater than 2.0 ppm.

With this document, EPA, after consultation with the NJDEP, modifies the selected remedy for the soils and groundwater as follows (item numbers below correspond to ROD components 1 through 8 listed on page 2):

1. floating product and associated smear zone soils were excavated and disposed of off-site as an alternative to the active removal system selected in the ROD due to the low yield of floating product extraction system previously installed;
3. bis (2-ethylhexyl) phthalate (DEHP) impacted soils were excavated and disposed of off-site instead of being consolidated into a soil treatment zone;

4. no reinfiltration of treated groundwater will be performed for the purpose of treating soil contamination, as all contaminated site soils were excavated to meet cleanup standards and disposed of off-site;
5. following implementation of the source reduction remediation, all disturbed areas were restored to proposed final grades with a vegetative soil cover. The ROD selected a vegetative cover over the area of groundwater infiltration;
6. excavation and off-site disposal of soils containing PCBs and lead were completed to meet the more stringent New Jersey Residential Direct Contact Soil Cleanup Criteria (RDCSCC) (0.49 ppm and 400 ppm, respectively) instead of the Non-Residential Direct Contact Soil Cleanup Criteria (NRDCSCC) (2.0 ppm and 600 ppm, respectively) as required in the ROD;
7. all soils above site-established cleanup levels were excavated and disposed of off-site during the source reduction remediation, instead of the excavation of some soils and on-site treatment through flushing of other soils as selected in the ROD;
8. environmental use restrictions on the property as selected in the ROD are no longer needed since RDCSCC were met for PCBs and lead at the site.

It should be noted that while most of the site soils were excavated to levels below the water table, thereby removing all contaminants, there is a limited area of soils in the southwest corner of the site, called the B-2 area, where soils were excavated to a depth of 2 feet and the excavation was then backfilled with clean fill. Two post-excavation samples collected at the base of this excavation in this area exceeded the NJDEP residential soil cleanup goal for antimony of 14 ppm. The concentrations of antimony collected at the base of the excavation are well below NJDEP's non-residential cleanup goal, and are covered with two feet of clean soil. Based on a review of all post-excavation samples of this limited area, EPA and NJDEP have determined that the concentrations of antimony detected during the post-excavation sampling event do not

warrant environmental use restrictions on the property. A detailed evaluation of this issue is available for review in the site files.

Also, it should be noted that this ESD does not address any changes to component 2 of the ROD which relates to the groundwater portion of the remedy. Therefore, this ESD does not address any changes to the groundwater pump and treat system as required by the ROD. The purpose of the pump and treat system is to address the residual groundwater contamination after the floating product areas have been remediated. The pump and treat component of the remedy is currently being reevaluated. NJDEP's and EPA's review of the groundwater data indicate the potential for Monitored Natural Attenuation (MNA) to be an appropriate groundwater remedy for a portion of the groundwater contamination. In January 2005, L.E. Carpenter began to implement an MNA work plan to collect the required data to determine if MNA will be an effective remedy for this Site. NJDEP and EPA will evaluate the results of this ongoing MNA investigation and will determine, in the future, if MNA is the appropriate remedy for this Site. In addition, further investigations are ongoing to further evaluate an area of benzene, toluene, ethylbenzene and xylene (BTEX) contamination near the Monitoring Well - 19 (MW-19) portion of the site property. This area is not believed to be appropriately addressed by MNA and may need an alternate remedy.

#### **State Comments**

NJDEP concurs with EPA's revision to the remedy and decision to issue this ESD.

#### **Affirmation of Statutory Determinations**

EPA and NJDEP believe that the modified remedy remains protective of human health and the environment, complies with federal and state requirements that were identified on the ROD and this ESD as applicable or relevant and appropriate to this remedial action, and over the long-term is cost-effective. In addition, the revised remedy utilizes permanent solutions and alternative treatment technologies to the maximum extent practicable for this site.

#### **Public Participation Activities**



In accordance with the NCP, a formal public comment period is not required when issuing an ESD. However, EPA will announce the availability of the ESD in a local newspaper of general circulation. The ESD has been placed in the site file and the information repository at the NJDEP Offices in Trenton, New Jersey.

  
George Pavlou, Director  
Emergency & Remedial Response Division

Date

9/27/07